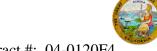
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.21

WELDING WITNESS REPORT

Resident Engineer: Pursell, Gary **Report No:** WWR-000503 Address: 333 Burma Road **Date Inspected:** 17-Jan-2008

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 800 **OSM Departure Time:** 1630 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Contractor: Location:** Shanghai, China

| Witness: | Procee | dure Qualification Rec | ord We | Welder Qualification | | Fracture Critical | |
|--------------------------------------|---------|------------------------|--------|----------------------|-------------------|-------------------|-----|
| | Weldi | ng NDT | Me | echnical Te | sting, describe: | | |
| Index Lot #: B78-001-08 | | | W | itness Lot # | : B78-001-08 | | |
| Bridge No: 34-0006 | | | Co | omponent: | Bid 52 | | |
| Welder: Zhu Haipi | | | ID | #: | N/A | | |
| Joint Descri | ption: | Skewed "T" Joint | | N/A | WPS ID #: | PWPS-B-T-2213 | N/A |
| Base Metal: | | ASTM Gr. 345 | | N/A | PQR ID#: | HP200801-1 | N/A |
| Thickness: | | 26 mm | | N/A | Process: | SMAW | N/A |
| Electrode Spec/Class: AWS A5.1/E7018 | | | | N/A | Positions: | 3G | N/A |
| Backing Mat | terial: | | | N/A | CWI: | Haung Wei | N/A |
| Average Am | ps: | 161 | | N/A | AWS Code: | AWS D1.5 2002 | N/A |
| Average Vol | ts: | 23 | | N/A | Applicable Sec: | AWS 5.31 | N/A |
| Travel Speed | d: | 70 | | N/A | Heat Input: | 3.15 | N/A |
| Preheat: | | 20 degrees Celsius | | N/A | | | |

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector Gregory Bertlesman was on site at ZPMC Welding Lab to observe the welding of the Procedure Qualification Record (PQR) test plate HP200801-1. PQR HP 200801-1 is a complete joint penetration skewed T joint, welded in the vertical position using the shielded metal arc welding (SMAW) process. Filler metal specification AWS A5.1 and classification E7018-1. The electrode diameter used was 3.2 mm in the root and 4 mm in the fill and cover passes. Test plates were 26 mm thick. Welding was performed per AWS D1.5 2002, Section 5.31 WPS Qualification. Welding was performed by Zhu Haiping. Total passes deposited were 2 from the acute angle side and 11 from the obtuse angle side. The acute side was welded first, then the test plate was backgouged using the air carbon arc process and grinder from the obtuse side. The welding on test coupon appeared to be in compliance with the contract documents. QA Inspector issued lot number B78-001-08 to the test coupon. ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Haung Wei was observed monitoring welding activities at the workstation. American Bridge/Flour representative Craig Knops was present during welding operations.

Summary of Conversations:

No reportable conversations on this date.

WELDING WITNESS REPORT

(Continued Page 2 of 2)

is in general conformance with the contract requirements.

Observed welding, testing or results: is not in conformance with the contract requirements.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

| Inspected By: | Bertlesman, Greg | Quality Assurance Inspector |
|---------------|------------------|-----------------------------|
| Reviewed By: | Cuellar,Robert | QA Reviewer |